



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D206-642-341BL
Job Sheet 198745



Part No: D206-642-341BL

Job Qty: 1 pcs

Part Name: Replacement Skidtube (Fits LH or RH)



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 8/6/19

Job Tracking No:

Created By: Marie Lajeunesse

Due Date: 8/30/19

Type: SOLD

Description:

Note: DWG D2650 REV.F(DEO) IPP Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM IPP Rev: I 08-09-29 revF as per dwg DD verified by: EC Est Rev: J 09-03-02 as per DSI9440 rev.a DD verified by: EC IPP rev K 10.08.03 chg ms27039-1-08 for "C" type EC ver: DD IPP Rev: L 12.11.22 now swage per ecn12-679 DD ver: JLM IPP Rev: M 14.04.25 ECN14-520 DD ver: JLM IPP REV: N 15.10.09 ADDED BL DD VERF: JLM IPP REV: O 16.01.22 PAR16-484 DD VERF: JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard Setup Hrs	Run Hrs	Workcenter/Supplier	Lead Time	Sign-off
110	Skidtubes - 1	1 pcs	8/30/19		0.00	1.58	Skidtubes - 1		
							Skidtubes - 2		
							Skidtubes - 3		
							Skidtubes - 4		
							Skidtubes - 5		
							Skidtubes - 6		
							Skidtubes - 7		
115	QC 5	1 pcs	8/30/19		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
							QC 5 - 61		
							QC 5 - 81		
116	QC 9	1 pcs	8/30/19		0.00	0.00	QC 9 - 10		
							QC 9 - 18		

PRIORITY



Container No: S207068



Part: D206-642-341BL

Job No: 198745

Serial No/Batch: S207068

Revision: F(deo)

Inspector:

Exp Date:

Instructions: FAA STC SA00475SE 19/04/17, TC STC SH98-

Dart Aerospace Ltd.
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Hawkesbury, ON K6A 1K7
CANADA
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Email: sales@dartaero.com
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DAS
AUG 21 2019 6:08
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120 Handfinish - 1-1 Chemical-B4B	1 pcs	8/30/19	0.00 1.17	QC 9 - 24	
				QC 9 - 43	
				QC 9 - 50	AUG 21 2019 DAS
				QC 9 - 9	50
				Handfinish - 1 - 1 - B4B	BEB 19-08-23
				Handfinish - 1 - 2 - B4B	
				Handfinish - 1 - 3 - B4B	SEP 17 2019
				Handfinish - 1 - 4 - B4B	
				Handfinish - 1 - 5 - B4B	
				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 - B4B	
				Handfinish - 1 - 16 - B4B	
				Handfinish - 1 - 17 - B4B	
				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
125 QC 7	1 pcs	8/30/19	0.00 0.00	QC 7 - 10	
				QC 7 - 13	
				QC 7 - 14	
				QC 7 - 15	
				QC 7 - 17	
				QC 7 - 18	
				QC 7 - 19	
				QC 7 - 2	
				QC 7 - 28	
				QC 7 - 3	
				QC 7 - 30	
				QC 7 - 34	
				QC 7 - 36	
				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	
				QC 7 - 59	
				QC 7 - 60	MCA
				QC 7 - 9	

					QC 7 - 68	
					QC 7 - 50	
					QC 7 - 67	
					QC 7 - 40	
					QC 7 - 24	
					QC 7 - 43	
					QC 7 - 61	
					QC 7 - 81	
130 Skidtubes - 2 - B4B	1 pcs	8/30/19	0.00 1.58		Skidtubes - 1 - B4B	00
					Skidtubes - 2 - B4B	
					Skidtubes - 3 - B4B	
					Skidtubes - 4 - B4B	
					Skidtubes - 5 - B4B	
					Skidtubes - 6 - B4B	
					Skidtubes - 7 - B4B	
140 QC 5	1 pcs	8/30/19	0.00 0.00		QC 5 - 10	88
					QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
150 Skidtubes - 3 - B4B	1 pcs	8/30/19	0.00 1.58		Skidtubes - 1 - B4B	00
					Skidtubes - 2 - B4B	
					Skidtubes - 3 - B4B	
					Skidtubes - 4 - B4B	
					Skidtubes - 5 - B4B	
					Skidtubes - 6 - B4B	
					Skidtubes - 7 - B4B	
180 QC 5	1 pcs	8/30/19	0.00 0.00		QC 5 - 10	
					QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	

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190 Handfinish - 2-1 Pressure-B4B	1 pcs	8/30/19	0.00 1.17	QC 5 - 81	
				Handfinish - 2 - 1 - B4B	SEP 18 2019
				Handfinish - 2 - 2 - B4B	
				Handfinish - 2 - 3 - B4B	
208 Spray Paint - 2 - B4B	1 pcs	8/30/19	0.00 1.00	Handfinish - 2 - 4 - B4B	
				Spray Paint - 1 - B4B	A8 19-9-18
				Spray Paint - 2 - B4B	
				Spray Paint - 3 - B4B	
210 QC 14	1 pcs	8/30/19	0.00 0.00	Spray Paint - 4 - B4B	
				QC 14 - 15	M1 19-9-19
				QC 14 - 2	
				QC 14 - 34	
				QC 14 - 41	
				QC 14 - 51	
				QC 14 - 58	
				QC 14 - 59	
				QC 14 - 9	
				QC 14 - 68	
				QC 14 - 40	
				QC 14 - 19	
				QC 14 - 43	
				QC 14 - 24	
				QC 14 - 61	
				QC 14 - 81	
220 Handfinish - 4-1-Assembly-B4B	1 pcs	8/30/19	0.00 1.17	Handfinish - 4 - 1 - B4B	M1 19-9-19
				Handfinish - 4 - 10 - B4B	
				Handfinish - 4 - 11 - B4B	
				Handfinish - 4 - 12 - B4B	
				Handfinish - 4 - 13 - B4B	
				Handfinish - 4 - 14 - B4B	
				Handfinish - 4 - 15 - B4B	
				Handfinish - 4 - 2 - B4B	
				Handfinish - 4 - 3 - B4B	
				Handfinish - 4 - 4 - B4B	
				Handfinish - 4 - 5 - B4B	
				Handfinish - 4 - 6 - B4B	
				Handfinish - 4 - 7 - B4B	
				Handfinish - 4 - 8 - B4B	
230 QC 3	1 pcs	8/30/19	0.00 0.00	Handfinish - 4 - 9 - B4B	
				QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	
				QC 3 - 59	

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				QC 3 - 68	
				QC 3 - 9	
				QC 3 - 40	
				QC 3 - 19	
				QC 3 - 43	
				QC 3 - 24	
				QC 3 - 61	
				QC 3 - 81	
240	QC 5	1	8/30/19	0.00 0.00	QC 5 - 10
		pcs			QC 5 - 12
					QC 5 - 17
					QC 5 - 18
					QC 5 - 19
					QC 5 - 22
					QC 5 - 24
					QC 5 - 3
					QC 5 - 43
					QC 5 - 49
					QC 5 - 51
					QC 5 - 58
					QC 5 - 68
					QC 5 - 9
					QC 5 - 50
					QC 5 - 30
					QC 5 - 40
					QC 5 - 61
					QC 5 - 81
250	Packaging 3-1 - Stock - B4B	1	8/30/19	0.00 0.00	Packaging 3 - 1 - B4B
		pcs			Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					Packaging 3 - 11 - B4B
					Packaging 3 - 12 - B4B
					Packaging 3 - 13 - B4B
					Packaging 3 - 14 - B4B
					Packaging 3 - 15 - B4B
					Packaging 3 - 16 - B4B
					Packaging 3 - 17 - B4B
					Packaging 3 - 18 - B4B
					Packaging 3 - 19 - B4B
					Packaging 3 - 20 - B4B
					Packaging 3 - 21 - B4B
					Packaging 3 - 22 - B4B
					Packaging 3 - 23 - B4B
					Packaging 3 - 24 - B4B
					Packaging 3 - 25 - B4B
					Packaging 3 - 26 - B4B
					Packaging 3 - 27 - B4B
					Packaging 3 - 28 - B4B
					Packaging 3 - 29 - B4B
					Packaging 3 - 30 - B4B
					Packaging 3 - 31 - B4B
					Packaging 3 - 32 - B4B

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Max B.

4/20/2019

				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	DAG
				Packaging 3 - 36 - B4B	21
255 DC - 1 - B4B	1	8/30/19	0.00 0.00	DC - 1 - B4B	9-80
	pcs			DC - 2 - B4B	SEP 20 2019
260 QC 21 - FG	1	8/30/19	0.00 0.00	QC 21 - FG - 21	
	pcs			QC 21 - FG - 70	DAG
				QC 21 - FG - 53	21 SEP 20 2019

Part Op 110 - Skid tubes 1-Debur Fwd edge of tube 2-Scribe "Identify Batch Number" 3-Remove ridge on inside of Fwd edge of
 Descriptions: tube as per Dwg D2650 4-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required. A/R
 Aluminum Rod 138789/137541 5-Grind weld flush to cap on top surface only. 6-Cut aft end to length as per dwg D2650
 7-Drill pilot holes using drill Jig DT8168A (A & B) and DT8025. 8-Drill holes for wearplates using DT 8028-5. Open to Ø
 0.297". 9-Open Aft Cap Hole using #6 Drill Bit 10-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5
 Drilling Detail 11-Remove inner indexing ridge on aft end of skid tubes as per Dwg D2650 12- Ream holes to finished size
 as per Dwg D2650, D2650-5 Drilling Detail (without cutting fluid) 13-Debur.

115 - QC5- Inspect part completeness to step on W/O

116 - QC9- Inspect visual per QSI004- Fusion Welds

120 - Chemical Conversion Coat per QSI005 4.1

125 - QC7-Inspect Chemical Conversion Coat

130 - Skid tubes -1- Bond D2654-5 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs. cure time before
 cutting Start Date: _____ Time: _____ Finish Date: _____ Time: _____ A/R Sikaflex-291

Sikaflex expiry date: 07/25/2020

140 - QC5- Inspect part completeness to step on W/O

150 - Skid tubes - 1- Insert D4720-1 Spacer. Swage to 0.313" X 0.75" DP per QSI 002. Trim and grind flush per QSI 002

180 - QC5- Inspect part completeness to step on W/O

190 - Pressure Wash per QSI005 4.3/ Clean and remove all markings

208 - Prime and Paint DELFLEET BLUE as per QSI005 Prime 5156329 Paint 5156329 Clear 5156359

210 - QC14- Inspect Spray Paint

220 - HandFinish4 (Assemble as per dwg - 1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside
 insert holes before installing wearpad/wearplate. A/R Sikaflex-291 5163334 Sikaflex expiry date: 12-11-16 2-
 Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess
 adhesive 3-Install MS27039-4-06 Screw 4-Inspect for foreign object per QSI 024 5-Install D2646 Aft Cap and seal with
 SikaflexClean excess adhesive A/R Sikaflex-291 5163334 Sikaflex expiry date: 12-11-16 6- Install D2680-041
 Nut Plate as per Dwg D2650 7-Wing Walk as per Dwg D2650-5 and QSI 005 4.4 Batch: 5204362

230 - QC3- Inspect Part Finish

240 - QC5- Inspect part completeness to step on W/O

250 - Identify and pack for shipping as per PPP D206-642-341 Location:FG083

255 - Document Control - Photocopy bluefile and create labels per PPP D206-642-341 CHG005

260 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2620	Skid tube, 206 Skid tube	1 pcs (1 ea)	110-Skid tubes - 1	5189522
D2647	Cap	1 pcs (1 ea)	110-Skid tubes - 1	5166098
D2654-5	Web	1 pcs (1 ea)	130-Skid tubes - 2 - B4B	5123889
D4720-1	Spacer	19 pcs (19 ea)	150-Skid tubes - 3 - B4B	5173039 X18
ALS4-1032-130	Rivnut	54 Ea (54 ea)	220-Handfinish - 4-1-Assembly-B4B	5057267
CCR264SS3-3	Cherry Rivet	2 Ea (2 ea)	220-Handfinish - 4-1-Assembly-B4B	5095527
CR3212-4-03	Cherry Rivet	2 Ea (2 ea)	220-Handfinish - 4-1-Assembly-B4B	5119017
D2646BL	Aft Cap	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5179725
D2651-1BL	Plug	14 pcs (14 ea)	220-Handfinish - 4-1-Assembly-B4B	5167902
D2651-3	O-Ring	14 pcs (14 ea)	220-Handfinish - 4-1-Assembly-B4B	5180346
D2680-041BL	Nut Plate	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5169117
D3537-1	Wearpad	6 pcs (6 ea)	220-Handfinish - 4-1-Assembly-B4B	5204500
D3537-3	Wearpad	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5195634
D4956-11	Wearplate Fwd	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5206716
D4956-23	Wearplate Center Fwd	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5201342
D4956-35	Wearplate Aft	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5201109
MS27039-1-08	Screw	2 Ea (2 ea)	220-Handfinish - 4-1-Assembly-B4B	5162897
MS27039-4-06	Screw	1 Ea (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5166971
MS27039C1-08	Screw	54 Ea (54 ea)	220-Handfinish - 4-1-Assembly-B4B	5135102 (x48)
NAS1149C0332R	Washer (AN960C10L)	54 Ea (54 ea)	220-Handfinish - 4-1-Assembly-B4B	5143136
NAS1149D0332J	Washer	2 Ea (2 ea)	220-Handfinish - 4-1-Assembly-B4B	5178370
NAS1149D0463J	Washer	1 Ea (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5142447

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
110-Skidtubes - 1	D2620	1	7	0
	D2647	1	32	0
130-Skidtubes - 2 - B4B	D2654-5	1	9	0
150-Skidtubes - 3 - B4B	D4720-1	19	20	0
220-Handfinish - 4-1-Assembly-B4B	ALS4-1032-130	54	6,994	0
	CCR264SS3-3	2	105	0
	CR3212-4-03	2	64	0
	D2646BL	1	2	0
	D2651-1BL	14	52	0
	D2651-3	14	225	0
	D2680-041BL	1	18	0
	D3537-1	6	51	0
	D3537-3	1	24	0
	D4956-11	1	5	0
	D4956-23	1	19	0
	D4956-35	1	19	0
	MS27039-1-08	2	411	0
	MS27039-4-06	1	86	0
	MS27039C1-08	54	309	0
	NAS1149C0332R	54	3,456	0
	NAS1149D0332J	2	2,549	0
	NAS1149D0463J	1	4,268	0
Part Specifications				
Specifications could not be found.				

Plex 8/6/19 9:36 AM Dart.lajeunesse.marie



DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 3 OF 6
APPROVED		TITLE	SCALE
DATE	08.08.08	206/407 SKIDTUBE ASSEMBLIES	NTS
CONFIRMED & OK'D BY DART AEROSPACE USA, INC Not to be used for manufacturing or construction of components for the aircraft without the written permission of the manufacturer. This document is the property of DART Aerospace USA, Inc. and is not to be distributed outside of the company or its customers.			

DRAWING NO. D2650	TITLE 206/407 SKIDTUBE ASSEMBLIES	REV. F	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D2650-F-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN 12.10.12	CHECKED 12.10.12	DATE 12.10.12	MFG. APPR. 12.10.12	APPROVED 12.10.12	DE APPR. 12.10.12		

PURPOSE:
CHANGE C'BORED WELDED CROSSBOLT SPACERS TO SWAGED SPACERS

CHANGE:
PARTS LIST IS AMENDED AS FOLLOWS:

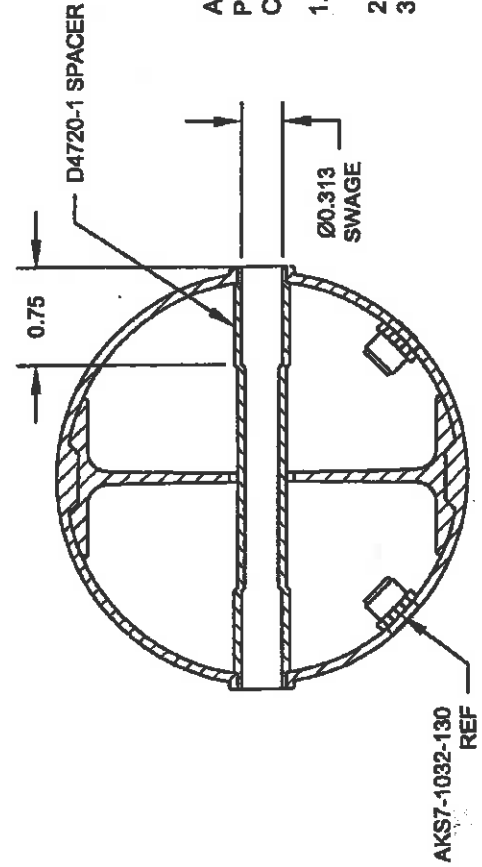
IS:

QTY	QTY	QTY	QTY	DESCRIPTION
-1	-3	-5	-7	
1	1	0	0	CROSS BOLT SPACER
16	17	19	23	D4720-1 SPACER

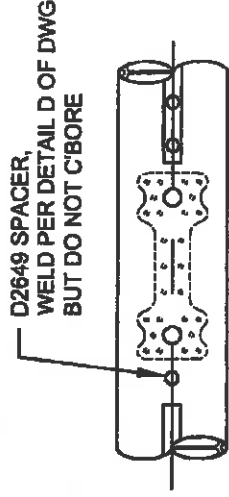
WAS:

17	18	19	23	D2649	CROSS BOLT SPACER
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ADD DETAIL G BELOW, WHICH IS THE SAME SECTION VIEW AS DETAIL D OF DWG. C'BORED HOLES ARE NOW SWAGED PER DETAIL G BELOW. FOR THE Ø0.375 HOLE THAT IS NOT C'BORED, WELD PER DETAIL D OF DWG (SEE AMENDED DETAIL B FOR REFERENCE).



DETAIL G
FOR Ø0.375 HOLES ONLY
FOR HOLES THAT ARE CURRENTLY C'BORED ONLY
NOT TO SCALE



DETAIL B
AMENDMENT TO DETAIL B
NOT TO SCALE

RELEASED
2012-11-16

AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.375 HOLES THAT ARE CURRENTLY C'BORED:

1. INSERT D4720-1 SPACER, 16 PL (-1) OR 17 PL (-3) OR 19 PL (-5) OR 23 PL (-7)
2. SWAGE TO Ø0.313 X 0.75 DP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

Entered: _____

Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE



NCR No. _____

Route update only ☐

DISPOSITION		DEPARTMENT/PROCESS			
Job: _____	☒ Rework ☐ Scrap ☐ Use-as-is	☐ Skid-tube ☐ Machining ☐ Large Fab	☐ Cross tube ☐ Small Fab ☐ Finishing	☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging	☒ Engineering ☐ Water Jet ☐ Supplier ☐ Quality
Date: 12/18/21	Sequence #: _____	QTY Affected: _____		MRB (QSI042) 12/18/21	
Description Work Order Deviation		Disposition			
Tow ring hole on dwg $\phi 0.625$, too small for tow ring.		Drill to $\phi 0.640$.			
Root Cause		Fault Category			
Operator ☐	Pressure/Forced ☐	Contamination ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Manufacturing Process ☐	Bending ☐	Misaligned/off center ☐	Folio/Program ☐	Outside Tolerance ☐	
Equip/Tooling ☐	Crushing ☐	BOM/Route ☐	Grain Direction ☐	Drawing ☐	
Handling/Preservation ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Finish ☐	
Material ☐	Crimp/Kink/Ripple/Wave/Twist ☐	Incomplete/Unclear Instructions ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Product Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Out of Sequence ☐	Misread ☐	
Process Improvement ☐	Mislabeled ☐	Fit/Function ☐	Off-set/Set-up ☐		
Human Factors ☐	Other/Details: _____				
Lead hand / Supervisor		QC / QA Coordinator			